

PATENT

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1450, Alexandria, VA 22313-1450.

Phoebe Pogson

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 10/056,935

Confirmation No. : 3970

Applicants: Timothy B. Cowles et al.

: October 18, 2001

Attorney Docket No.: 501030.01

: 2824 Art Unit

Customer No.

: 27,076

Examiner: Hien N. Nguyen

Title

Filed

: LOW POWER AUTO-REFRESH CIRCUIT AND METHOD FOR DYNAMIC

RANDOM ACCESS MEMORIES

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Mail Stop RCE Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with 37 C.F.R. §§ 1.56 and 1.97 through 1.98, applicants wish to make known to the Patent and Trademark Office the references set forth on the attached form PTO-1449 (copies of the cited references, as required under 37 C.F.R. § 1.98, are enclosed). Although the aforesaid references are made known to the Patent and Trademark Office in compliance with applicants' duty to disclose all information they are aware of which is believed relevant to the examination of the above-identified application, applicants believe that their invention is patentable.

Please acknowledge receipt of this Supplemental Information Disclosure Statement and kindly make the cited references of record in the above-identified application.

Respectfully submitted,

DORSEY & WHITNEY LLP

Edward W. Bulchis Registration No. 26,847

EWB:dms

Enclosures:

Postcard
Check
Fee Transmittal (+ copy)
Copy of Information Disclosure Statement
Form PTO-1449
Cited References (24)

1420 Fifth Avenue, Suite 3400 Seattle, WA 98101 Telephone (206) 903-8800 Facsimile (206) 903-8820

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FORM PTO-1449 (REV.7-80)

INFORMATION DIS

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

LOSURE STATEMENT

sheets if necessary)

ATTY. DOCKET NO. 501030.01

APPLICATION NO. 10/056,935

APPLICANT(S)

Timothy B. Cowles et al.

FILING DATE

GROUP ART UNIT

October 18, 2001 | 2824

U.S. PATENT DOCUMENTS											
*EXAMINER INITIAL	-	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE				
	AA	5,400,289	03/21/95	Blodgett	365	222					
	ΑB	5,450,364	09/12/95	Stephens, Jr., et al.	365	222					
	AC	5,636,173	06/03/97	Schaefer	365	230.03					
	AD	5,881,016	03/09/99	Kenkare et al.	365	230.03					
	AE	6,031,782	02/29/00	Kobashi et al.	365	228					
	AF	6,115,278	09/05/00	Deneroff et al.	365	52 .					
	AG	6,172,928 B1	01/09/01	Ooishi	365	222					
	АН	6,188,641 B1	02/13/0	Uchida	365	233					
	AI	6,215,686 B1	04/10/01	Deneroff et al.	365	52					
•	AJ	6,215,714 B1	04/10/01	Takemae et al.	365	222					
	AK	6,253,340 B1	06/26/01	Cowles et al.	714	718					
	AL	6,292,420 B1	09/18/01	Kim et al.	365	222					
	AM	6,349,068 B2	02/19/02	Takemae et al.	365	222					
	AN	6,414,894 B2	07/02/02	Ooishi et al.	365	222					
	AO	6,438,055 B1	08/20/02	Taguchi et al.	365	222					
	AP	6,449,203 B1	09/10/02	Cowles et al.	365	222					
	AQ	6,504,787 B2	01/07/03	Tsubouchi et al.	365	230.05					
	AR	6,510,099 B1	01/21/03	Wilcox et al.	365	230.06					
	AS	6,549,479 B2	04/15/03	Blodgett	365	222					
	AT	6,552,596 B2	04/22/03	Cowles et al.	327	318					
	AU	6,552,955 B1	04/22/03	Miki	365	233					
	AV	6,560,158 B2	05/06/03	Choi et al.	365	226					
	AW	6,570,804 B1	05/27/03	Blodgett	365	225.7					
	AX	6,597,617 B2	07/22/03	Ooishi et al.	365	222					

EXAMINER

DATE CONSIDERED

^{*} EXAMINER:

No.: \$0-1266: Deposit Account Name: PORSEY & WHITNEY LLP Code		Complete if Known							
First Named Inventor Timothy B. Cowles et al.					 				
First Named Invention Timothy B. Cowles et al.	TER TRANSMITTAL QUEET								
Atty, Docket Number 501030.01 FEE CALCULATION (Continued)	PIECIKANSWII IAL SHEET	First Na	First Named Inventor			Timothy B. Cowles et al.			
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Atty, Docket Number 501030.01 FEE CALCULATION (Continued)	nci 3 v				Hien N. Nguyen				
1. X The Commissioner is hereby authorized to charge any additional fee required under 37 C.F.R. §5, 1.6 and 1.17 and 1.36(a)(3) and credit any over payments to Deposit Account Non: 50-1286; Deposit Account Name: DORSEY 8 WHITNEY LLP	The season of th	Atty. Do	ocket N	umber	501030).01			
Large Entity	METHOD OF PAYMENT (Check One)	FEE CALCULATION (Continued)							
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Second S	XI Chack Enclosed	1051	130	2051		<u> </u>			
1. BASIC FILING FEE Large Entity Small Entity		1052	50	2052	25				
BASIC FILING FEE Small Entity Fee Fee Fee Fee Fee Fee Fee God Si Code Si Utility Filing Fee 1251 110 2251 55 Extension for reply within first month 1002 340 2002 170 Design Filing Fee 1252 420 2252 210 Extension for reply within first month 1004 770 2004 385 Reissue Filing Fee 1253 950 2253 475 Extension for reply within 3" month 1004 770 2004 385 Reissue Filing Fee 1253 950 2253 475 Extension for reply within 4" month 1005 160 2005 80 Provisional Filling Fee 1255 2,010 2255 2,010 2255 3,005 Extension for reply within 5" month 1004 770 2004 385 Reissue Filing Fee 1253 950 2253 475 Extension for reply within 4" month 1005 160 2005 80 Provisional Filling Fee 1255 2,010 2255 1,005 Extension for reply within 5" month 1005 160 2005 80 Provisional Filling Fee 1255 2,010 2255 1,005 Extension for reply within 5" month 1005 160 2005 80 Provisional Filling Fee 1255 2,010 2255 1,005 Extension for reply within 5" month 1005 160 2005 80 Provisional Filling Fee 1255 2,010 2255 1,005 Extension for reply within 5" month 1005 1400 1300 2401 1400	FEE CALCULATION	1053	130	1053	130	-			
Fee Fee Code (\$) Fee		1812	2,520	1812	2,520				
Code S2	Foo Foo Foo	1804	920	1804	920		(
1002 340 2002 170 [] Design Filling Fee		1805	1,840	1805	1,840				
1003 530 2003 265 Plant Filing Fee 1253 950 2253 475 Extension for reply within 3" month 1004 770 2004 385 Reissue Filing Fee 1255 2,010 2255 1,005 Extension for reply within 5" month 1005 160 2005 80 Provisional Filing Fee 1255 2,010 2255 1,005 Extension for reply within 5" month 160 2005 80 Provisional Filing Fee 1255 2,010 2255 1,005 Extension for reply within 5" month 160 2005 80 Plant Filing Fee 1255 2,010 2255 1,005 Extension for reply within 5" month 160 2005 80 Plant Filing Fee 1402 330 2401 165 Notice of Appeal 1402 330 2402 165 Filing a brief in support of an appeal 1402 330 2402 165 Filing a brief in support of an appeal 1402 330 2403 145 Request for oral hearing 1403 280 2403 145 Request for oral hearing 1403 280 2403 145 Request for oral hearing 1403 280 2403 145 Request for oral hearing 1403 2452 140 2452 140 2452 140 2452 140 2452 140 2452 140 2452 140 2452 140 2452 140 2452 140 2452 240 24	1001 770 2001 385 [] Utility Filing Fee	1251	110	2251	55	Extension for reply within first month			
1004 770 2004 385	1002 340 2002 170 [] Design Filing Fee	1252	420	2252	210	Extension for reply within 2 nd month			
1005 160 2005 80	1003 530 2003 265 [] Plant Filing Fee	1253	950	2253	475	Extension for reply within 3 rd month			
Subtotal (1) \$0 1401 330 2401 165 Notice of Appeal	1004 770 2004 385 [] Reissue Filing Fee	1254	1,480	2254	740	Extension for reply within 4th month			
2. EXTRA CLAIM FEES Current Claims	1005 160 2005 80 [] Provisional Filing Fee	1255	2,010	2255	1,005	Extension for reply within 5th month			
2. EXTRA CLAIM FEES	Subtotal (1) \$0	1401	330	2401	165	Notice of Appeal			
Current Claims		1402	330	2402	165	Filing a brief in support of an appeal			
Total		1403	290	2403	145	Request for oral hearing			
Ind.	Control Cidente	1814	110	2814	55	Terminal Disclaimer Fee			
Multiple Dependent Claims Subtotal (2) \$0 1501 1,330 2453 665 Petition to revive — unintentional		1452	110	2452	55	Petition to revive – unavoidable			
Subtotal (2) \$0 1501 1,330 2501 665 Utility/Reissue issue fee			1.330		665	Petition to revive – unintentional	-		
Large Entity Small Entity Fee Fee Code (5) Code (5) Fee Description 1202 18 2202 9 Claims in excess of 20 1201 86 2201 43 Independent claims in excess of 3 1203 290 2203 145 Multiple dependent Claim 1204 86 2204 43 Reissue independent claims over original patent 1205 18 2205 9 Reissue claims in excess of 20 and over original patent 1206 18 2205 9 Reissue claims in excess of 20 and over original patent Total Amount of Payment: Submitted by:					665	Utility/Reissue issue fee			
Large Entity Small Entity Fee Fee Fee Fee Code (\$) Code (\$) Fee Description 1202 18 2202 9 Claims in excess of 20 1201 86 2201 43 Independent claims in excess of 3 1203 290 2203 145 Multiple dependent Claim 1204 86 2204 43 Reissue independent claims over original patent 1205 18 2205 9 Total Amount of Payment: 1206 Submitted by: 1503 640 2503 320 Plant issue fee 1480 130 1480 130 Petitions to the Commissioner 1480 130 1480 130 Petitions to the Commissioner 1480 130 1480 130 Submission of IDS Recording each patent assignment per property (times number of properties) Reissue claims in excess of 20 and over original patent Reissue claims in excess of 20 and over original patent 1204 87 2204 13 Reissue independent claims over original patent 1205 18 2205 9 Total Amount of Payment: \$77	Subtotal (2)\$0			100		•			
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1202 18 2202 9 Claims in excess of 20 1201 86 2201 43 Independent claims in excess of 3 1203 290 2203 145 Multiple dependent Claim 1204 86 2204 43 Reissue independent claims over original patent 1205 18 2205 9 Total Amount of Payment: \$77 Submitted by: 1208 1807 50 1807 50 Processing fee under 37 CFR 1.17(q) 1807 1807 1807 1807 1807 1808 Submission of IDS 1808 Recording each patent assignment per property (times number of properties) 1809 1800 1800 1800 1800 Submission of IDS 1800 1800 1800 1800 Submission of IDS 1800 1800 1800 1800 Submission of IDS 1800 Submi									
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Total Amount of Payment: \$77	or organization	Other f	fee (spe	cify)					
Submitted by:						Subtotal (3)	\$770		
					1	Total Amount of Payment:	\$770		
Name: Edward W-Bulchis Reg. No.: 26,847 Telephone: (206) 903-8800	Submitted by:								
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